

15 wherein an anti-LTNF comprising an antibody made

- (1) against natural LTNF, or
- (2) against a synthetic peptide consisting of at least five amino acids of the sequence

Leu Lys Ala Met Asp Pro Thr Pro Pro Leu Trp Ile Lys Thr Glu

is used as a reagent for the ELISA tests and reacts with free toxin in both the first test and the second test,

20 wherein the numerical assay values in both the first test and the second test are given by ELISA color assay for anti-LTNF, and

wherein an anti-serum having a higher neutralizing index is indicative of a greater potency for that anti-serum against a given toxin.

Remarks

Status of claims

Claims 5 and 7-16 are pending and under final rejection. It is proposed to amend claims 7, 8 and 9 as shown above for compliance with 35 USC 112, or alternatively, to place the claims in better form for appeal. This is the first opportunity for applicant to respond to the grounds of rejection as stated for claims 7, 8 and 9 and the amendment was therefore not made earlier.

Detailed discussion

35 USC 112 rejections

Claim 7

Claim 7 is rejected as vague and indefinite on the basis of the recitation "conducting an ELISA binding or ELISA titer." This rejection is traversed but is obviated by the present amendment.

vice Amended) A method as in claim 9 wherein the anti-toxins are anti-venoms.

11. (Amended) A composition of matter consisting essentially of an IgG antibody made against a peptide consisting of five to ten amino acids from the N-terminal sequence

Leu Lys Ala Met Asp Pro Thr Pro Pro Leu Trp Ile Lys Thr Glu

in the absence of carrier protein molecule.

12. A composition of matter as in claim 11, which is in the form of an immunoglobulin selected from the group consisting of an immunized animal serum, a hybridoma cell culture and a mouse ascitic fluid.

13. (Amended) A composition of matter as in claim 12, which reacts immunologically with a toxin selected from the group consisting of an animal toxin, a plant toxin and bacterial toxin.

14. (Amended) A process comprising contacting, in vitro, a biological toxin with an antibody made against a sequence of at least five amino acids from the N-terminal of the sequence

Leu Lys Ala Met Asp Pro Thr Pro Pro Leu Trp Ile Lys Thr Glu

under conditions to cause the biological toxin to react immunologically with said antibody.

15. A process as in claim 14, wherein the novel antibody is made against LTNF having a non-immunological binding with toxins such that its antibody has the property of being able to react immunologically in vitro with a wide range of biological toxins.

16. (Amended) A process as in claim 15 which is carried out according to an ELISA double-sandwich method protocol.

Toxin → Antigen
↓
Antibody →
↓
Polymer

Toxin →
↓
LTNF →
↓
Antibody

APPENDIX OF CLAIMS INVOLVED IN THE APPEAL

(twice amended) A process comprising

Claim 5

(a) bringing together, under in vitro conditions,

(1) an anti-LTNF made

(i) against natural LTNF, or

(ii) against a synthetic peptide consisting of at least five amino acids of the sequence

Leu Lys Ala Met Asp Pro Thr Pro Pro Leu Trp Ile Lys Thr Glu

with

(2) at least one biological toxin derived from animal, plant or bacteria,

to cause an immunological reaction which produces a product capable of being detected by ELISA, and

(b) detecting the product of such reaction by ELISA.